

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
Young-sin PARK et al.) Group Art Unit: Unassigned
Application No.: New Application) Examiner: Unassigned
Filed: Herewith)
For: ANODE THIN FILM FOR LITHIUM SECONDARY BATTERY AND PREPARATION METHOD THEREOF))))

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

- 1) U.S. Patent No. 5,618,640
- 2) U.S. Patent No. 6,203,944
- 3) Yoshio Idota, et al., "Tin-Based Amorphous Oxide: A High Capacity Lithium-Ion Storage Material", Science, 276 (1997) 1395-1397
- 4) Mao et al., "Mechanically Alloyed Sn-Fe(-C) Powders as Anode Materials for Li-Ion Batteries", J. Electrochem. Soc., 146(2) (1999) 405-413
- 5) Beaulieu et al., "The Reaction of Lithium with Sn-Mn-C Intermetallics Prepared by mechanical Alloying", J. Electrochem. Soc., 147 (9) (2000) 3237-3241
- 6) Kepler et al., " $\text{Li}_x\text{Cu}_6\text{Sn}_5$ (0 < x < 13): An Intermetallic Insertion Electrode for Rechargeable Lithium Batteries", Electrochem. Solid-State Lett., 2 (7) (1999) 307-309
- 7) Yang et al., "Sub-Microcrystalline Sn and Sn-SnSb Powders as Lithium Storage Materials for Lithium Ion Batteries", Electrochem. Solid-State Lett., 2 (4) (1999) 161-163

Information Disclosure Statement Application No. New Application Attorney's Docket No. 030681-346 Page 2

8) Yang et al. "Ultrafine Sn and SNSb_{0.14} Powders for Lithium Storage Materials in Lithium-Ion Batteries", J. Electrochem. Soc., 146 (11) (1999) 4009-4013

The documents are being submitted within 3 months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever is later, therefore no fee or certification is required under 37 C.F.R. § 1.97(b).

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, LAL.P.

By:

Charles F. Wieland III Registration No. 33,096

P.O. Box 1404 Alexandria, Virginia 22313-1404 (703) 836-6620

Date: January <u>10</u>, 2002

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

ATTORNEY'S DKT NO.	APPLICATION NO. 6			
030681-346	New APplication			
APPLICANT				
Yang-sing PARK et al.	o.			
FILING DATE	GROUP			
Herewith -	Unassigned			
· · · · · · · · · · · · · · · · · · ·				

			U.S. PATENT DOCU	UMENTS					
	U.S. Patent D	Document	T						
Examiner Initials	Number	Kind Code (if known)		Name of Patentee or Applicant of Cited Document			Date of Publication (MM-DD-YYYY)		
	5,618,640		ldota et al.						
	6,203,944		Turner et al.						
		1							
-						i e			
				······································					
		<u> </u>							
		F(OREIGN PATENT DO	CUMENTS	•			1.3	
	Foreign Patent								
Examiner Initials	Number	Kind Code (if known)	Country	!	1	ate of Publication (MM-DD-YYYY)		slation	
Hilliais	Number	(II KIIOwin	Country		,	(IVIIVI-DD-TTTT)	Yes	no	
							\vdash	 	
	 				—		\vdash	 	
				-	 		\vdash	 	
		NON F	PATENT LITERATURE	E DOCUME	NTS			15	
	1		r (in CAPITAL LETTERS),						
Examiner Initials	item (book,	, magazine, jour	rnal, serial, symposium, ca publisher, city and/or co	•			∍er(s),		
	Yoshio Idota, et al., 1395-1397	, "Tin-Based Am	norphous Oxide: A High (•			э, 276	(1997)	
	·		Sn-Fe(-C) Powders as And	ode Materials f	or Li-lon	Batteries", J. Electroche	em. So	c.,	
		ne Reaction of Lit	ithium with Sn-Mn-C Inter	rmetallics Prep	ared by r	nechanical Alloying", J.	Electro	ochem.	
		u ₆ Sn₅ (0 < x < 13)	3): An Intermêtallic Insertic 7) (1999) 307-309	on Electrode fo	r Rechar	geable Lithium Batteries	;",		
		/licrocrystalline S	Sn and Sn-SnSb Powders	as Lithium Stc	orage Ma	terials for Lithium Ion Ba	atteries	,	
		ne Sn and SNSb	0 _{0.14} Powders for Lithium S	Storage Materia	als in Lith	nium-lon Batteries", J. E	lectroc	hem.	
		20/							
						 			
Examiner Signature			l	Date Considered					

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.